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PATENT
Docket No. 1002.2.72

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant:	Larry Stevens')
)
Serial No.:	09/228,325)
)
Filed:	January 11, 1999) Group Art
) Unit: 3711
)
For:	SYSTEM AND METHOD FOR BONDING)
	AN ACRYLIC SURFACE TO A FRAME)
)
Examiner:	Michael Chambers)

APPELLANT'S REPLY BRIEF

Assistant Commissioner
for Patents
Washington, D.C. 20231

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Sir:

This Reply Brief is being filed pursuant to 37 C.F.R. § 1.193(b) in response to the Examiner's Answer to Appellant's Brief. A Request for Oral Hearing is submitted in a separate paper. This Reply Brief is being filed in triplicate.

The Examiner's Answer presented several new arguments, issues, and statements that require clarification. Many other statements in the Examiner's Answer merely repeat the final Office Action and are addressed in Appellant's Appeal Brief, which is incorporated herein.

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Examiner's Answer, Item (10) *Grounds of Rejection*

Page 3, line 1. In rejecting claim 1, the Examiner stated: "Hying does not clearly disclose the type of adhesive used." This statement is false. Hying clearly discloses the type of adhesive used. In fact, Hying discloses one and only one adhesive, double sided tape. Hying further acknowledges problems associated with the adhesive and discloses and claims a non-adhesive solution.

Page 3, line 9. The Examiner included the Nunes patent in his rejection of claims 2 and 4-18. The Nunes patent is not listed in Item (9) Prior Art of Record relied upon in the rejection of claims.

Page 3, line 10. The Examiner stated that "Hying et al fails to disclose the specific claimed attachment means." None of the claims on appeal recite "attachment means." Appellant requests the Examiner to examine the claims as a whole and as they are written.

Claim 1 recites as one of its limitations "a catalyzed elastomeric adhesive sandwiched between the frame bonding surface and the backboard bonding surface, wherein the elastomeric adhesive provides sufficient adhesion and flexibility to the acrylic backboard and frame structure bonding surfaces to be used in the game of basketball." Appellant agrees with the Examiner that Hying fails to disclose this limitation.

Page 3, line 16. With regard to claim 2, the Examiner stated that "[t]he bond gap claimed is typical in an epoxy paste type application." No prior art was cited to support this statement. The Examiner appears to be relying upon facts within his personal knowledge. Pursuant to MPEP 2144.03 Appellant respectfully requests the Examiner to provide proper evidence supporting this statement.

Furthermore, the bond gap of a "typical epoxy paste type application" is irrelevant to rejected claim 2. Epoxy pastes are known to be rigid thermosetting materials and not elastomeric adhesives that provide sufficient adhesion and flexibility as claimed.

Page 3, line 20. As to claims 4-6, 14, and 15, the Examiner failed to apply the appropriate obviousness analysis. On page 4, lines 3-5 the Examiner concluded: "[t]he recitation of following the manufacturer's recommended instructions is [sic] does not constitute patentable features of an invention." The rejected claims are drawn to a basketball backboard assembly, not to a recitation of the adhesive manufacturer's recommended instructions.

Section 103(a) requires examination of the claimed "subject matter as a whole." The Examiner's examination errors are discussed in greater detail below.

Examiner's Answer, Item (11) *Response to Arguments*

Pages 6-7, Argument I. Appellant's Argument I focuses on the lack of any teaching, motivation, or suggestion to select, combine, and modify the cited references to arrive at the claimed invention as a whole. Rather than provide the required teaching, motivation, or suggestion, the Examiner concluded that substituting one adhesive for another is an "obvious variation" under Section 103(a). The Examiner further argued that substituting a new more desirable material for an older material is not patentable. Citing *Rex Chainbelt Inc. v. Harco Products*, 181 USPQ 432 (C.D. Calif. 1973).

The Examiner's focus on the obviousness of a substitution instead of on the invention as a whole was a legally improper way to simplify the difficult obviousness analysis. The Federal Circuit has stated:

Focusing on the obviousness of substitutions and differences instead of on the invention as a whole, as the district court did in frequently describing the claimed invention as the mere substitution of monoclonal for polyclonal antibodies in a sandwich assay, was a legally improper way to simplify the difficult determination of obviousness. *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 USPQ 81 (Fed. Cir. 1986).

The Examiner's "black letter" legal conclusions may be true in some fact scenarios, but not true in other fact scenarios, and certainly not true in this instance. Every question of obviousness under Section 103(a) must be examined on its own facts and circumstances.

For example, substituting one adhesive for another may be an obvious variation if the relevant prior art teaches, motivates, or suggests the variation. But if there is no teaching, motivation, or suggestion for the variation, then it may not be obvious, particularly if secondary consideration evidence indicates the substitution would not have been obvious.

Moreover, the Examiner quoted dicta from the *Rex Chainbelt* case and not the true holding of the court. *Rex Chainbelt* sued Harco for infringement of a patent covering a

rock crusher. The patent claims covered a rock crusher in which the backing material for the wearing parts was epoxy resin. The prior art backing material was zinc. According to the Findings of Fact, it was obvious to one skilled in the art to substitute epoxy resin for solder-type materials, and zinc was a known solder-type material. Hence, there was a clear teaching, motivation, and suggestion to substitute zinc with epoxy. The Rex Chainbelt patent claims were found to be unpatentable based upon general obviousness principles of Section 103, not because of the dicta quoted by the Examiner.

Furthermore, even if *Rex Chainbelt* dicta were legal precedent, it would not apply to the present application. Double sided foam tapes of the type used in prior art acrylic basketball backboard systems were developed in the 1980's. See, for example, Norton's U.S. Pat. No. 4,839,206, issued June 13, 1989. In contrast, the elastomeric adhesives of the type used in the present invention were known well before the development of double sided foam tapes. Thus, contrary to the Examiner's assumption, the presently claimed basketball backboard assembly may actually include an old material substituted for a new material. If it were truly obvious to replace double sided tape with a suitable elastomeric adhesive, those in the industry would have done so long before appellant, but it was not done.

In the present case, the record is void of any teaching, motivation, or suggestion to replace the double-sided tape of Hying with the claimed catalyzed elastomeric adhesive. The fact that catalyzed elastomeric adhesive is "old" does not provide the necessary teaching, motivation, or suggestion to make the combination. In fact, most inventions are the novel combination of old elements. The Federal Circuit in *McGinley v. Franklin Sports*, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001) stated:

The genius of invention is often a combination of known elements which in hindsight seems preordained. To prevent hindsight invalidation of patent claims, the law requires some "teaching, suggestion or reason" to combine cited references. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1579, 42 USPQ2d 1378, 1383 (Fed. Cir. 1997). When the art in question is relatively simple, as is the case here, the opportunity to judge by hindsight is particularly tempting. Consequently, the tests of whether to combine references need to be applied rigorously.

More recently, the Federal Circuit in *In re Lee*, 61 USPQ2d 1430 (Fed. Cir. 2002) vacated and remanded a decision of the Board of Patent Appeals and Interferences which failed to provide adequate reasons why one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious. The Federal Circuit stated:

The factual inquiry whether to combine references must be thorough and searching. [quoting *McGinley v. Franklin Sports*, 60 USPQ2d at 1008] It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with. *See, e.g., Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed. Cir. 2000)("a showing of a suggestion, teaching, or motivation to combine the prior art references is an 'essential component of an obviousness holding'")(quoting *C.R. Bard, Inc., v. M3 Systems, Inc.*, 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998)); *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999)("Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references."); *In re Dance*, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998)(there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant); *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988)("teachings of references can be combined *only* if there is some suggestion or incentive to do so.")(emphasis in original)(quoting *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984)).

The need for specificity pervades this authority. *See, e.g., In re Kotzab*, 217 F.2d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000)("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed").

In re Lee, 61 USPQ2d at 1433.

In the present case, Appellant acknowledges in the specification that acrylic basketball backboards have been fabricated using double sided foam tape. Appellant further acknowledges in the specification that suitable elastomeric adhesives are commercially available. However, the Examiner has failed to provide specific evidence or reasoning why the skilled artisan, with no knowledge of the claimed invention, would have replaced

double sided foam tape with a suitable catalyzed elastomeric adhesive in the manner claimed. Merely stating that elastomeric adhesives are known is insufficient to meet the Examiner's burden.

Pages 7-8, Argument III. The Examiner stated that glass bead bond spacers are "old and conventional in the art." No prior art of record supports this conclusion. Pursuant to MPEP 2144.03, Appellant requests the Examiner to provide suitable evidence showing that (1) glass bead bond gap spacers are old and conventional in the art and (2) one skilled in the art would have been motivated to use bond gap spacers in the claimed invention. Alternatively, withdrawal of the rejection is requested.

Page 8, Argument IV. The Examiner stated that the main thrust of the office action was to show that "the claimed invention is merely using an adhesive and bond gap spacers in their prescribed manner." From this, it appears that the Examiner has not properly examined the claimed "subject matter as a whole" according to Section 103(a). The pending claims are not drawn to "using an adhesive and bond gap spacers in their prescribed manner." The pending claims are drawn to a basketball backboard assembly sized and configured for playing the game of basketball that includes various specific structural features and elements. The Examiner has plainly misapplied Section 103(a).

In addition, the Examiner places undue weight on undefined "knowledge generally available to one of ordinary skill." The Federal Circuit in *In re Lee* was particularly critical of the Board and the examiner for assuming obviousness of the claims based upon unsupported conclusory statements and references to "common knowledge and common sense."

The "common knowledge and common sense" on which the Board relied in rejecting Lee's application are not the specialized knowledge and expertise contemplated by the Administrative Procedure Act. Conclusory statements such as those here provided do not fulfill the agency's obligation.

In re Lee, 61 USPQ2d at 1434. The Court further stated:

Thus when [the examiner and the Board] rely on what they assert to be general knowledge to negate patentability, that knowledge must be articulated and placed on the record.

Id. at 1435. In this case, the Examiner has assumed obviousness based upon unsupported conclusory statements and vague references to "knowledge generally available to one of ordinary skill." This was error.

Pages 8-9, Argument V. The Examiner failed to give due weight to the declaration evidence of Jerry Ward and Curtis Nye. First, the Examiner dismissed the substantial cost savings as being "a conventional design consideration." If cost savings were truly a conventional design consideration, then double sided tape would never have been selected and used in the industry for over seven years. Instead a superior elastomeric adhesive would have been used in the industry from the beginning.

Second, the Examiner stated, without any supporting evidence, that there were a "variety of equivalent attachment means available to one of ordinary skill in the art." Appellant is only aware of double sided foam tape and Hying's plastic clips as "equivalent attachment means." Pursuant to MPEP 2144.03, Appellant requests the Examiner to identify the "variety of equivalent attachment means."

Third, the Examiner argued that bolts and nuts could be used to attach an acrylic basketball backboard to a frame and achieve 100% cold climate durability. Appellant refers the Examiner to the specification, page 1, line 21 through page 2, line 2.

There are several problems which must be overcome to successfully use an acrylic basketball backboard. First, the backboard must be adequately bonded to a support frame. Second, there must be sufficient flexibility in the bond to dissipate the impact energy from the backboard to the frame. If the bond between the backboard and frame is too rigid, then the backboard can fracture. If the bond is too loose, then the adhesion fails.

Bolts and nuts are rigid fasteners. Therefore, they would not provide the necessary flexibility to be suitable "attachment means."

Fourth, the Examiner argued, without supporting evidence, that the cost savings "would also occur if another well known adhesive were used." Pursuant to MPEP 2144.03, Appellant requests the Examiner to provide suitable evidence supporting this conclusion.

Finally, the Examiner improperly concluded, without logical reasoning, that copying was evidence of obviousness. It is well settled that copying is one of the secondary considerations of nonobviousness that must be considered in a proper Section 103 analysis. MPEP 716.06. It was error for the Examiner to ignore this evidence.

SUMMARY

In view of the foregoing, Appellant maintains that each of the claims on appeal has been improperly rejected. Reversal of the Examiner's rejection and allowance of the pending claims 1, 2, and 4-18 is respectfully requested.

Respectfully submitted,



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Date: April 18, 2002

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